WISHA REGIONAL DIRECTIVE

Department of Labor and Industries
Division of Occupational Safety and Health

33.27 Cholinesterase Depression

Date Issued: July 12, 2006

I. Background

The Department of Labor and Industries, Division of Occupational Safety and Health (DOSH) adopted WAC 296-307-148, Cholinesterase Monitoring, in October 2003. An updated rule was adopted on December 20, 2005 with an effective date of February 1, 2006.

The cholinesterase monitoring rule requires agricultural employers to document hours employees spend handling* toxicity category I or II organophosphate or N-methyl-carbamate cholinesterase-inhibiting pesticides. Employees who meet a specified handling hour threshold must be provided with the opportunity to participate in a medical program to monitor blood cholinesterase levels.

All blood samples collected under the cholinesterase monitoring rule are currently analyzed by the Public Health Laboratory of the Department of Health (DOH). Test data will be used to monitor exposure trends and allocate resources to support the cholinesterase monitoring program.

II. Scope and Application

This WISHA Regional Directive (WRD) provides guidance to WISHA consultation and enforcement staff regarding WAC 296-307-148, Cholinesterase Monitoring and will remain in effect until rescinded. This WRD replaces any previous guidance on the subject, whether formal or informal.

III. Consultation and Enforcement Activity

A. When will referrals to consultation be made?

DOSH Technical Services will refer all initial employee cholinesterase depressions >20% from baseline to the appropriate regional consultation office. The regional office will contact the employer to inform them of the availability of consultation

* NOTE: Handling refers to those job duties listed in the definition of "Handler" contained in WAC 296-307-11005, Pesticides (Worker Protection Standard)

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services. When the employer requests consultation services such services will be conducted in accordance with the procedures outlined in the DOSH Consultation Manual.

Information regarding pesticide handling and potential exposure routes will be documented on the Cholinesterase Monitoring Report Sheet. A copy of the completed report shall be submitted to the DOSH Technical Services occupational health nurse.

B. When will referrals to enforcement be made?

Referrals to enforcement services will be made under circumstances including, but not limited to:

- The employer declines the offer of consultation services for a second time.
- An employer has received at least 2 consultations as a result of cholinesterase depressions but continues to have additional employees with a significant cholinesterase depression.
- Consultation identifies circumstances that warrant a compliance referral, e.g. hazards are not abated in a timely manner.
- DOSH Technical Services identifies trends or circumstances that indicate employer safety program deficiencies, e.g. cholinesterase depression clusters or ongoing employee cholinesterase depressions.
- C. Should an employer be cited for an employee cholinesterase depression >20% from baseline, i.e. is a cholinesterase depression >20% from baseline a rule violation in and of itself?

No, cholinesterase depression in and of itself is not a rule violation nor does it indicate noncompliance with DOSH regulation. The rule is designed to aid employers in monitoring the efficacy of their pesticide worker protection programs. A >20% cholinesterase depression requires the employer to evaluate the worker protection program and employee pesticide handling practices. The employer must document this evaluation and corrections made to reduce potential pesticide exposure.

The employer can use the Helpful Tool contained in WAC 296-307-148, "Worker Protection Standard Checklist of Requirements" to conduct the required evaluations and document any corrective action taken.

Workplace hazard violations found should be cited under the most specific rule in chapter 296-307 or the Agriculture Safe Place Standard, WAC 296-307-045.

D. How will compliance with the recordkeeping, medical monitoring and other requirements of the rule be determined?

A review of records required under Chapter 296-307 WAC, Part J and J-1 will be the primary method used to determine if covered pesticides are being used and if employees have met the specified exposure threshold.

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Employers must provide signed declination statements for employees covered by the medical monitoring provisions of the rule but who are not participating in the testing program.

E. May enforcement staff make referrals?

Yes, referrals will be made as follows:

- To Employment Standards for issues such as docking pay for PPE and for underage workers.
- To the Washington State Department of Agriculture Compliance Manager (360-902-2036) for pesticide application record keeping, licensing requirement violations, and pesticide label application concerns.
- To the Washington State Department of Health Pesticide Program Manager (360-236-3361) for symptoms related to pesticides, reported by an employee.
- F. Will enforcement staff receive referrals from other agencies for cholinesterase depressions?

Referrals from other agencies, such as WSDA or DOH, are not anticipated for cholinesterase depressions; however, these agencies are expected to continue making referrals for other pesticide-related issues. Worker complaints may also be received and inspections should be scheduled following existing DOSH guidelines.

IV. Technical Services Protocols

A. What roles will Technical Services have in supporting the rule?

Technical Services will do the following:

- Notify the medical provider of significant cholinesterase depressions.
- Routinely analyze test data for trends
- Provide referrals to regional consultation and enforcement offices as outlined in this WRD.
- Provide technical support to the regions on request

Approved:	
	Stephen M. Cant, CIH, Assistant Director
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	Division of Occupational Safety and Health

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Cholinesterase Monitoring Report Sheet Chapter 296-307 WAC, Parts I through J-1

Department of Labor & Industries Division of Occupational Safety & Health PO Box 44610 Olympia, WA 98504

Fax: (360) 902-5438

Company:					
Address:					
# Acres:		Crops:	_		
Fa	rm Worker ID				
1.	1. Class I and II organophosphate and N-methyl-carbamate pesticides the FW handled:				
	30 days prior to ChE depression				
	For entire year	ar			
2.	. FW handling activities (e.g. mixer/loader/applicator):				
3.	Application method and equipment (make, type) used:				
4.	List PPE (e.g., Plastic coated rain suit, nitrile gloves, etc.):				
5.	. If respirators used list respirator (type, make) and cartridge type, and change-out schedule:				
6.	6. Describe decon procedures (e.g. employee showers and changes clothes after applying):				
7.	7. Describe rule violations found:				
8.	Describe potential	exposure scenarios:			
9.	Date the FW was re	emoved from handling covered pesticides	N/A		
	Signature:	Date:			